

support systems of the building, structure, or facility) that—

(i) is constructed (including facilities constructed for lease), renovated, or purchased, in whole or in part, by the Administrator for use by the Federal Government; or

(ii) is leased, in whole or in part, by the Administrator for use by the Federal Government—

(I) except as provided in subclause (II), for a term of not less than 5 years; or

(II) for a term of less than 5 years, if the Administrator determines that use of cost-effective technologies and practices would result in the payback of expenses.

(B) **INCLUSION.**—The term “GSA facility” includes any group of buildings, structures, or facilities described in subparagraph (A) (including the associated energy-consuming support systems of the buildings, structures, and facilities).

(C) **EXEMPTION.**—The Administrator may exempt from the definition of “GSA facility” under this paragraph a building, structure, or facility that meets the requirements of section 543(c) of Public Law 95-619 (42 U.S.C. 8253(c)).

#### **Subtitle B—Installation of Photovoltaic System at Department of Energy Headquarters Building**

##### **SEC. 411. INSTALLATION OF PHOTOVOLTAIC SYSTEM AT DEPARTMENT OF ENERGY HEADQUARTERS BUILDING.**

(a) **IN GENERAL.**—The Administrator of General Services shall install a photovoltaic system, as set forth in the Sun Wall Design Project, for the headquarters building of the Department of Energy located at 1000 Independence Avenue, Southwest, Washington, D.C., commonly known as the Forrestal Building.

(b) **FUNDING.**—There shall be available from the Federal Buildings Fund established by section 592 of title 40, United States Code, \$30,000,000 to carry out this section. Such sums shall be derived from the unobligated balance of amounts made available from the Fund for fiscal year 2007, and prior fiscal years, for repairs and alterations and other activities (excluding amounts made available for the energy program). Such sums shall remain available until expended.

(c) **OBLIGATION OF FUNDS.**—None of the funds made available pursuant to subsection (b) may be obligated prior to September 30, 2007.

#### **Subtitle C—High-Performance Green Buildings**

##### **SEC. 421. SHORT TITLE.**

This subtitle may be cited as the “High-Performance Green Buildings Act of 2007”.

##### **SEC. 422. FINDINGS AND PURPOSES.**

(a) **FINDINGS.**—Congress finds that—

(1) high-performance green buildings—

(A) reduce energy, water, and material resource use and the generation of waste;

(B) improve indoor environmental quality, and protect indoor air quality by, for example, using materials that emit fewer or no toxic chemicals into the indoor air;

(C) improve thermal comfort;

(D) improve lighting and the acoustic environment;

(E) improve the health and productivity of individuals who live and work in the buildings;

(F) improve indoor and outdoor impacts of the buildings on human health and the environment;

(G) increase the use of environmentally preferable products, including biobased, recycled, and nontoxic products with lower lifecycle impacts; and

(H) increase opportunities for reuse of materials and for recycling;

(2) during the planning, design, and construction of a high-performance green build-

ing, the environmental and energy impacts of building location and site design, the minimization of energy and materials use, and the environmental impacts of the building are considered;

(3) according to the United States Green Building Council, certified green buildings, as compared to conventional buildings—

(A) use an average of 36 percent less total energy (and in some cases up to 50 to 70 percent less total energy);

(B) use 30 percent less water; and

(C) reduce waste costs, often by 50 to 60 percent;

(4) the benefits of high-performance green buildings are important, because in the United States, buildings are responsible for approximately—

(A) 39 percent of primary energy use;

(B) 12 percent of potable water use;

(C) 136,000,000 tons of building-related construction and demolition debris;

(D) 70 percent of United States resource consumption; and

(E) 70 percent of electricity consumption;

(5) green building certification programs can be highly beneficial by disseminating up-to-date information and expertise regarding high-performance green buildings, and by providing third-party verification of green building design, practices, and materials, and other aspects of buildings; and

(6) a July 2006 study completed for the General Services Administration, entitled “Sustainable Building Rating Systems Summary,” concluded that—

(A) green building standards are an important means to encourage better practices;

(B) the Leadership in Energy and Environmental Design (LEED) standard for green building certification is “currently the dominant system in the United States market and is being adapted to multiple markets worldwide”; and

(C) there are other useful green building certification or rating programs in various stages of development and adoption, including the Green Globes program and other rating systems.

(b) **PURPOSES.**—The purposes of this subtitle are—

(1) to encourage the Federal Government to act as an example for State and local governments, the private sector, and individuals by building high-performance green buildings that reduce energy use and environmental impacts;

(2) to establish an Office within the General Services Administration, and a Green Building Advisory Committee, to advance the goals of conducting research and development and public outreach, and to move the Federal Government toward construction of high-performance green buildings;

(3) to encourage States, local governments, and school systems to site, build, renovate, and operate high-performance green schools through the adoption of voluntary guidelines for those schools, the dissemination of grants, and the adoption of environmental health plans and programs;

(4) to strengthen Federal leadership on high-performance green buildings through the adoption of incentives for high-performance green buildings, and improved green procurement by Federal agencies; and

(5) to demonstrate that high-performance green buildings can and do provide significant benefits, in order to encourage wider adoption of green building practices, through the adoption of demonstration projects.

##### **SEC. 423. DEFINITIONS.**

In this subtitle:

(1) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of General Services.

(2) **COMMITTEE.**—The term “Committee” means the Green Building Advisory Committee established under section 433(a).

(3) **DIRECTOR.**—The term “Director” means the individual appointed to the position established under section 431(a).

(4) **FEDERAL FACILITY.**—

(A) **IN GENERAL.**—The term “Federal facility” means any building or facility the intended use of which requires the building or facility to be—

(i) accessible to the public; and

(ii) constructed or altered by or on behalf of the United States.

(B) **EXCLUSIONS.**—The term “Federal facility” does not include a privately-owned residential or commercial structure that is not leased by the Federal Government.

(5) **HIGH-PERFORMANCE GREEN BUILDING.**—The term “high-performance green building” means a building—

(A) that, during its life-cycle—

(i) reduces energy, water, and material resource use and the generation of waste;

(ii) improves indoor environmental quality, including protecting indoor air quality during construction, using low-emitting materials, improving thermal comfort, and improving lighting and acoustic environments that affect occupant health and productivity;

(iii) improves indoor and outdoor impacts of the building on human health and the environment;

(iv) increases the use of environmentally preferable products, including biobased, recycled content, and nontoxic products with lower life-cycle impacts;

(v) increases reuse and recycling opportunities; and

(vi) integrates systems in the building; and

(B) for which, during its planning, design, and construction, the environmental and energy impacts of building location and site design are considered.

(6) **LIFE CYCLE.**—The term “life cycle”, with respect to a high-performance green building, means all stages of the useful life of the building (including components, equipment, systems, and controls of the building) beginning at conception of a green building project and continuing through site selection, design, construction, landscaping, commissioning, operation, maintenance, renovation, deconstruction or demolition, removal, and recycling of the green building.

(7) **LIFE-CYCLE ASSESSMENT.**—The term “life-cycle assessment” means a comprehensive system approach for measuring the environmental performance of a product or service over the life of the product or service, beginning at raw materials acquisition and continuing through manufacturing, transportation, installation, use, reuse, and end-of-life waste management.

(8) **LIFE-CYCLE COSTING.**—The term “life-cycle costing”, with respect to a high-performance green building, means a technique of economic evaluation that—

(A) sums, over a given study period, the costs of initial investment (less resale value), replacements, operations (including energy use), and maintenance and repair of an investment decision; and

(B) is expressed—

(i) in present value terms, in the case of a study period equivalent to the longest useful life of the building, determined by taking into consideration the typical life of such a building in the area in which the building is to be located; or

(ii) in annual value terms, in the case of any other study period.

(9) **OFFICE.**—The term “Office” means the Office of High-Performance Green Buildings established under section 432(a).